May 11, 2012

Mr Jason Gunter
Remedial Project Manager
U S Environmental Protection Agency
Region 7 - Superfund Branch
901 North 5th Street
Kansas City, KS 66101

Re The Doe Run Company – Bonne Terre Superfund Site, Eastern and Western Portions Quarterly Progress Report

Dear Mr Gunter

As required by Article VIII, Section 33 of the Administrative Order on Consent (Docket No CERCLA-7-2000-0024) and Article VIII, Section 29 of the Administrative Order on Consent (Docket No CERCLA-7-2000-0025) for the referenced projects and on behalf of The Doe Run Company, a progress report for the period January 1, 2012 to March 31, 2012 is enclosed If you have any questions or comments, please call me at 573-638-5020 or Mark Nations at 573-518-0800

Sincerely,

Ty L Morris, P E , R G
Vice President

TLM/jms
Enclosure
c Mark Nations – TDRC
Matt Wohl – TDRC (electronic only)
Kathy Rangen – MDNR
Tim Skoglund – Barr Engineering

Bonne Terre Mine Tailings Site

Bonne Terre, Missouri

Removal Action - Quarterly Progress Report

Period January 1, 2012 – March 31, 2012

1 Significant Developments and Work Performed this Period

a Completed the 1st quarter stormwater sampling event for the southern detention basin sampling point (eastern portion) Results of this sample are included with this progress report

2 Problems Encountered this Period

a None

3 Significant Developments Anticipated and Work Scheduled for Next Period

a Complete the 2nd quarter 2012 stormwater sampling event for the southern detention basin sampling point

4 Planned Resolutions of Past or Anticipated Problems

a Not applicable

5 Changes in Personnel

a None

End of Quarterly Progress Report

March 21, 2012

Allison Olds
Barr Engineering Company
1001 Diamond Ridge
Suite 1100
Jefferson City, MO 65109
TEL (573) 638-5007
FAX (573) 638-5001

RE: Bonne Terre MTS/25/86-0014 **WorkOrder:** 12030699

Dear Allison Olds

TEKLAB, INC received 1 sample on 3/15/2012 10 19 00 AM for the analysis presented in the following report

Samples are analyzed on an as received basis unless otherwise requested and documented The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc

If you have any questions regarding these tests results, please feel free to call

Sincerely,

Michael L Austin
Project Manager
(618)344-1004 ex 16
MAustin@teklabinc com

Client Barr Engineering Company
Work Order 12030699
Client Project Bonne Terre MTS/25/86-0014
Report Date. 21-Mar-12

This reporting package includes the following

Client Barr Engineering Company | **Work Order** 12030699

Client Project: Bonne Terre MTS/25/86-0014 | **Report Date** 21-Mar-12

Abbr Definition

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation The reported result is final and includes all dilutions factors

DNI Did not ignite

DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated

IDPH IL Dept of Public Health

LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system The acceptable recovery range is in the QC Package (provided upon request)

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method The acceptable recovery range is listed in the QC Package (provided upon request)

MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses

MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system The acceptable recovery range is listed in the QC Package (provided upon request)

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method The acceptable recovery range is listed in the QC Package (provided upon request)

MW Molecular weight

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions The acceptable recovery range is listed in the QC Package (provided upon request)

RL The reporting limit the lowest level that the data is displayed in the final report The reporting limit may vary according to customer request or sample dilution The reporting limit may not be less than the MDL

RPD Relative percent difference is a calculated difference between two recoveries (ie MS/MSD) The acceptable recovery limit is listed in the QC Package (provided upon request)

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample, used to determine recovery deficiency or for other quality control purposes

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples

TNTC Too numerous to count (> 200 CFU)

Qualifiers

- Unknown hydrocarbon

B - Analyte detected in associated Method Blank

E - Value above quantitation range

H - Holding times exceeded

M - Manual Integration used to determine area response

ND - Not Detected at the Reporting Limit

R - RPD outside accepted recovery limits

S - Spike Recovery outside recovery limits

X - Value exceeds Maximum Contaminant Level

Client Barr Engineering Company
Client Project Bonne Terre MTS/25/86-0014

Work Order 12030699
Report Date 21-Mar-12

Cooler Receipt Temp: 1 2 °C

Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc com	Email	kmcclain@teklabinc com	Email	dthompson@teklabinc com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2013	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2013	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2012	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2012	Springfield
Arkansas	ADEQ	88-0966		3/14/2012	Collinsville
Illinois	IDPH	17584		4/30/2012	Collinsville
Kentucky	UST	0073		5/26/2012	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2012	Collinsville

Client: Barr Engineering Company
Work Order: 12030699
Client Project: Bonne Terre MTS/25/86-0014
Report Date: 21-Mar-12
Lab ID: 12030699-001
Client Sample ID: BTE-1 Qtr-12
Matrix: AQUEOUS
Collection Date: 03/14/2012 12:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 600 375.2 REV 2.0 1993 (TOTAL)								
Sulfate	NELAP	150		**331**	mg/L	2	03/19/2012 20:57	R161318
STANDARD METHOD 18TH ED. 4500-H B, LABORATORY ANALYZED								
Lab pH	NELAP	1.00		**7.37**		1	03/15/2012 15:24	R161174
STANDARD METHODS 18TH ED. 2340 C								
Hardness, as (CaCO3)	NELAP	5		**720**	mg/L	1	03/16/2012 11:40	R161211
STANDARD METHODS 18TH ED. 2540 D								
Total Suspended Solids	NELAP	6	R	**8**	mg/L	1	03/16/2012 12:42	R161202
% RPD was outside the QC limits due to low level results. When duplicate results for TSS are 20 mg/L or less and have a difference of no greater than the PQL, the results are considered within the precision of the test method and are reportable.								
STANDARD METHODS 18TH ED. 2540 F								
Solids, Settleable	NELAP	0.1		**< 0.1**	ml/L	1	03/15/2012 12:46	R161167
STANDARD METHODS 18TH ED. 5310 C, ORGANIC CARBON								
Total Organic Carbon (TOC)	NELAP	1.0		**1.8**	mg/L	1	03/16/2012 4:55	R161208
EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)								
Cadmium	NELAP	2.00		**< 2.00**	µg/L	1	03/19/2012 12:53	76113
Zinc	NELAP	10.0		**112**	µg/L	1	03/19/2012 12:53	76113
EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)								
Cadmium	NELAP	2.00		**< 2.00**	µg/L	1	03/16/2012 15:57	76109
Zinc	NELAP	10.0		**124**	µg/L	1	03/16/2012 15:57	76109
STANDARD METHODS 18TH ED. 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)								
Lead	NELAP	2.00		**< 2.00**	µg/L	1	03/16/2012 12:12	76115
STANDARD METHODS 18TH ED. 3030 E, 3113 B, METALS BY GFAA								
Lead	NELAP	2.00	X	**8.10**	µg/L	1	03/19/2012 14:25	76100

Client: Barr Engineering Company
Client Project: Bonne Terre MTS/25/86-0014

Work Order: 12030699
Report Date: 21-Mar-12

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
12030699-001	BTE-1 Qtr-12	Aqueous	5	03/14/2012 12:35

Client: Barr Engineering Company
Work Order: 12030699
Client Project: Bonne Terre MTS/25/86-0014
Report Date: 21-Mar-12

Sample ID	Client Sample ID / Test Name	Collection Date	Received Date / Prep Date/Time	Analysis Date/Time
12030699-001A	BTE-1 Qtr-12	03/14/2012 12:35	3/15/2012 10:19:00 AM	
	Standard Methods 18th Ed. 2540 F			03/15/2012 12:46
12030699-001B	BTE-1 Qtr-12	03/14/2012 12:35	3/15/2012 10:19:00 AM	
	EPA 600 375.2 Rev 2.0 1993 (Total)			03/19/2012 20:57
	Standard Method 18th Ed. 4500-H B, Laboratory Analyzed			03/15/2012 15:24
	Standard Methods 18th Ed. 2340 C			03/16/2012 11:40
	Standard Methods 18th Ed. 2540 D			03/16/2012 12:42
12030699-001C	BTE-1 Qtr-12	03/14/2012 12:35	3/15/2012 10:19:00 AM	
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)		03/15/2012 15:11	03/16/2012 15:57
	Standard Methods 18th Ed. 3030 E, 3113 B, Metals by GFAA		03/15/2012 14:08	03/19/2012 14:25
12030699-001D	BTE-1 Qtr-12	03/14/2012 12:35	3/15/2012 10:19:00 AM	
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)		03/15/2012 17:20	03/19/2012 12:53
	Standard Methods 18th Ed. 3030 B, 3113 B, Metals by GFAA (Dissolved)		03/15/2012 18:00	03/16/2012 12:12
12030699-001E	BTE-1 Qtr-12	03/14/2012 12:35	3/15/2012 10:19:00 AM	
	Standard Methods 18th Ed. 5310 C, Organic Carbon			03/16/2012 4:55

Client: Barr Engineering Company

Work Order: 12030699

Client Project: Bonne Terre MTS/25/86-0014

Report Date: 21-Mar-12

EPA 600 375.2 REV 2.0 1993 (TOTAL)

Batch R161263 **SampType:** MBLK Units mg/L

SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	75		< 75						03/16/2012

Batch R161263 **SampType:** LCS Units mg/L

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	75		150	150	0	100.1	90	110	03/16/2012

Batch R161318 **SampType:** MBLK Units mg/L

SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	75		< 75						03/19/2012

Batch R161318 **SampType:** LCS Units mg/L

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	75		140	150	0	93.2	90	110	03/19/2012

Batch R161318 **SampType:** MS Units mg/L

SampID: 12030699-001B MS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	150		533	0	331.0	0	85	115	03/19/2012

Batch R161318 **SampType:** MSD Units mg/L RPD Limit 10

SampID: 12030699-001B MSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate	150		554	0	331.0	0	532.8	3.92	03/19/2012

STANDARD METHOD 18TH ED. 4500-H B, LABORATORY ANALYZED

Batch R161174 **SampType:** LCS Units

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lab pH	1.00		6.97	7.00	0	99.6	99.1	100.8	03/15/2012

Batch R161174 **SampType:** DUP Units RPD Limit 10

SampID: 12030699-001BDUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Lab pH	1.00		7.37				7.370	0.00	03/15/2012

Client: Barr Engineering Company **Work Order:** 12030699

Client Project: Bonne Terre MTS/25/86-0014 **Report Date:** 21-Mar-12

STANDARD METHODS 18TH ED. 2340 C

Batch R161211 **SampType:** MBLK Units mg/L

SampID: MB-R161211

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Hardness, as (CaCO3)	5		< 5						03/16/2012

Batch R161211 **SampType:** LCS Units mg/L

SampID: LCS-R161211

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Hardness, as (CaCO3)	5		1020	1000	0	102.0	90	110	03/16/2012

Batch R161211 **SampType:** MS Units mg/L

SampID: 12030699-001BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Hardness, as (CaCO3)	5		1120	400	720.0	100.0	85	115	03/16/2012

Batch R161211 **SampType:** MSD Units mg/L RPD Limit 10

SampID: 12030699-001BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Hardness, as (CaCO3)	5		1140	400	720.0	105.0	1120	1.77	03/16/2012

STANDARD METHODS 18TH ED. 2540 D

Batch R161202 **SampType:** MBLK Units mg/L

SampID: MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Suspended Solids	6		< 6						03/16/2012

Batch R161202 **SampType:** LCS Units mg/L

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Suspended Solids	6		101	100	0	101.0	85	115	03/16/2012
Total Suspended Solids	6		94	100	0	94.0	85	115	03/16/2012
Total Suspended Solids	6		94	100	0	94.0	85	115	03/16/2012
Total Suspended Solids	6		101	100	0	101.0	85	115	03/16/2012

Batch R161202 **SampType:** dup Units mg/L RPD Limit 15

SampID: 12030699-001B DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Suspended Solids	6	R	6				8.000	28.57	03/16/2012

STANDARD METHODS 18TH ED. 5310 C, ORGANIC CARBON

Batch R161208 **SampType:** MBLK Units mg/L

SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)	1.0		< 1.0						03/15/2012

Client: Barr Engineering Company

Work Order: 12030699

Client Project: Bonne Terre MTS/25/86-0014

Report Date: 21-Mar-12

STANDARD METHODS 18TH ED. 5310 C, ORGANIC CARBON

Batch R161208 **SampType:** LCS Units mg/L

SampID: ICV/LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)	5.0		50.2	48.2	0	104.1	89.6	109.5	03/15/2012

EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)

Batch 76113 **SampType:** MBLK Units µg/L

SampID: MB-76113

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	03/16/2012
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	03/20/2012
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	03/19/2012
Zinc	10.0		< 10.0	10.0	0	0	-100	100	03/16/2012
Zinc	10.0		< 10.0	10.0	0	0	-100	100	03/19/2012

Batch 76113 **SampType:** LCS Units µg/L

SampID: LCS-76113

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		46.8	50.0	0	93.6	85	115	03/20/2012
Cadmium	2.00		45.1	50.0	0	90.2	85	115	03/16/2012
Cadmium	2.00		45.5	50.0	0	91.0	85	115	03/19/2012
Zinc	10.0		491	500	0	98.3	85	115	03/19/2012
Zinc	10.0		464	500	0	92.8	85	115	03/16/2012

Batch 76113 **SampType:** MS Units µg/L

SampID: 12030699-001DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		44.1	50.0	0	88.2	75	125	03/19/2012
Zinc	10.0		602	500	112.5	98.0	75	125	03/19/2012

Batch 76113 **SampType:** MSD Units µg/L RPD Limit 20

SampID: 12030699-001DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Cadmium	2.00		44.5	50.0	0	89.0	44.1	0.90	03/19/2012
Zinc	10.0		605	500	112.5	98.6	602.5	0.46	03/19/2012

EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)

Batch 76109 **SampType:** MBLK Units µg/L

SampID: MB-76109

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	03/16/2012
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	03/20/2012
Zinc	10.0		< 10.0	10.0	0	0	-100	100	03/16/2012

Client: Barr Engineering Company

Client Project: Bonne Terre MTS/25/86-0014

Work Order: 12030699

Report Date: 21-Mar-12

EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)

Batch 76109 **SampType:** LCS Units µg/L

SampID: LCS-76109

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		**50.5**	50.0	0	101.0	85	115	03/16/2012
Cadmium	2.00		**49.5**	50.0	0	99.0	85	115	03/20/2012
Zinc	10.0		**540**	500	0	108.0	85	115	03/16/2012

Batch 76109 **SampType:** MS Units µg/L

SampID: 12030699-001CMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium	2.00		**51.5**	50.0	0.3	102.4	75	125	03/16/2012
Zinc	10.0		**679**	500	124.3	111.0	75	125	03/16/2012

Batch 76109 **SampType:** MSD Units µg/L RPD Limit **20**

SampID: 12030699-001CMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Cadmium	2.00		**50.2**	50.0	0.3	99.8	51.5	2.56	03/16/2012
Zinc	10.0		**674**	500	124.3	110.0	679.4	0.78	03/16/2012

STANDARD METHODS 18TH ED. 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)

Batch 76115 **SampType:** MS Units µg/L

SampID: 12030699-001DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead	2.00		**16.9**	15.0	0.7649	107.3	70	130	03/16/2012

Batch 76115 **SampType:** MSD Units µg/L RPD Limit **20**

SampID: 12030699-001DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Lead	2.00		**16.6**	15.0	0.7649	105.6	16.8654	1.55	03/16/2012

STANDARD METHODS 18TH ED. 3030 E, 3113 B, METALS BY GFAA

Batch 76100 **SampType:** MBLK Units µg/L

SampID: MB-76100

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead	2.00		**< 2.00**	2.00	0	0	-100	100	03/19/2012

Batch 76100 **SampType:** LCS Units µg/L

SampID: LCS-76100

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead	2.00		**15.4**	15.0	0	102.5	85	115	03/19/2012

Batch 76100 **SampType:** MS Units µg/L

SampID: 12030699-001CMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead	4.00		**23.9**	15.0	8.0966	105.6	70	130	03/19/2012

Client: Barr Engineering Company
Work Order: 12030699
Client Project: Bonne Terre MTS/25/86-0014
Report Date: 21-Mar-12

STANDARD METHODS 18TH ED. 3030 E, 3113 B, METALS BY GFAA

Batch 76100 **SampType:** MSD Units µg/L RPD Limit 20

SampID: 12030699-001CMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Lead	4.00		**23.5**	15.0	8.0966	102.4	23.9404	2.02	03/19/2012

Client Barr Engineering Company
Client Project Bonne Terre MTS/25/86-0014

Work Order 12030699
Report Date 21-Mar-12

Carrier Ricky Schmidt

Received By SRH

Completed by Timothy W Mathis
On 15-Mar-12

Reviewed by Michael L Austin
On 15-Mar-12

Pages to follow | Chain of custody: 1 | Extra pages included: 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	1	2
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice	☐	
Chain of custody present?	Yes ☑	No ☐				
Chain of custody signed when relinquished and received?	Yes ☑	No ☐				
Chain of custody agrees with sample labels?	Yes ☑	No ☐				
Samples in proper container/bottle?	Yes ☑	No ☐				
Sample containers intact?	Yes ☑	No ☐				
Sufficient sample volume for indicated test?	Yes ☑	No ☐				
All samples received within holding time?	Yes ☑	No ☐				
Reported field parameters measured	Field ☐	Lab ☐	NA ☑			
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐				

When thermal preservation is required, samples are compliant with a temperature between 0 1°C - 6 0°C, or when samples are received on ice the same day as collected

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials	☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers	☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐		

Any No responses must be detailed below or on the COC

Custody seal(s) intact on shipping container/cooler

Print Form

Teklab Chain of Custody

Pg 1 of 1 Workorder 12030699

5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone (618)344-1004 ~ Fax (618)344-1005

Barr Engineering Co
1001 Diamond Ridge
Jefferson City | MO | 65109
Bonne Terre - 25/86-0014

Are the samples chilled? (•) Yes ( ) No with (•) Ice ( ) Blue ice

Preserved in (•) Lab ( ) Field TM 3-15-12

Cooler Temp 1.2 Sampler Chris Schulte

Comments: Invoice to Mark Nations Results to Allison Olds and Mark Nations, mnations@doerun com
Matrix is surface water
Metals = Cd, Pb, Zn
custody seal intact upon pick up

Contact Allison Olds eMail aolds@barr com Phone 573-638-5007 Requested Due Date Standard Billing/PO Per contract with Doe Run

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	pH	TSS	Sulfate	Settleable Solids	TOC	Total Metals	Dissolved Metals	Hardness				
12030699 001	BTE-1st QTR-12	3/14/12 12:35	Unpres	Aqueous	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Unpres	Aqueous	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Teklab Inc Courier Pick Up

Relinquished By *	Date/Time	Received By	Date/Time
Chris Schulte / Barr	3/14/12 / 14:30	R. Schmidt	3/15/12 08:46
R. Schmidt	3/15/12 10:19	Stephanie Hayes	3/15/12 10:19

* The individual signing this agreement on behalf of client acknowledges that they have read and understand the terms of this agreement and that they have the authority to sign on behalf of client